



SUBSTITUTE SPECIFICATION

5 TITLE OF THE INVENTION:

Nectarine Tree 'S 6816'

CROSS REFERENCE TO RELATED APPLICATIONS:

None

10

PRIORITY CLAIM:

This application claims priority of U.S. Provisional patent application Ser. No. 60/404,217 filed August 15, 2002.

15 STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT:

None

LATIN NAME OF THE GENUS AND SPECIES OF THE PLANT CLAIMED:

20 *Prunus persica* L. Batsch.

VARIETY DENOMINATION:

'S 6816'

BACKGROUND OF THE INVENTION

The new nectarine tree 'S 6816' was developed by the Institut National de la Recherche Agronomique (INRA) at Angers, France, as part of a controlled breeding program. 'S 6816' was one of several seedlings resulting from a cross of [(Kiang-Si x Independence) x Summergrand] x Marsun (all unpatented). 'S 6816' was asexually propagated by budding at Angers, France, and has been observed to remain true to type over successive asexually propagated generations.

BRIEF SUMMARY OF THE INVENTION

'S 6816' was selected for its suitability as a commercial nectarine tree cultivar. Fruit of the 'S 6816' cultivar matures in late July in central Washington state, and is notable for its aromatic and sweet yellow flesh. The fruit of 'S 6816' is distinguishable from that of the parent varieties by its flat shape and smooth skin. The characteristics which distinguish 'S 6816' from its parents are set forth in Table 1.

Table 1

Variety	Fruit Type	Shape	Flesh Color
S 6816	Nectarine	Flat	Yellow
Kiang-Si	Peach	Flat	Yellow
Independence	Nectarine	Round	Yellow
Summergrand	Nectarine	Round	Yellow
Marsun	Peach	Round	Yellow

This variety is distinguishable over related variety 'S 6817' (U.S. Patent Application Ser. No. 10/642,441) by its earlier maturity date and smaller and sweeter fruit.

BRIEF DESCRIPTION OF THE PHOTOGRAPHS:

FIG. 1 shows branches and blossoms of the new cultivar;

FIG. 2 shows a tree of the new cultivar;

FIG. 3 shows leaves of the new cultivar;

5 FIG. 4 shows a leaf, a stone, and a portion of a fruit of the new cultivar;

FIG. 5 shows fruit of the new cultivar; and

FIG. 6 shows a sectioned fruit of the new cultivar.

DETAILED BOTANICAL DESCRIPTION OF THE VARIETY:

10 The following is a detailed botanical description of 'S 6816,' a new and distinct nectarine tree, based on observations made during the 2004 growing season, of specimens planted at Parker, Washington, USA, in 1999. The described trees were grown on 'Lovell' (not patented) rootstock. All colors are described according to the Royal Horticultural Society Color Chart. It should be understood that the botanical and analytical characteristics described will vary somewhat depending
15 upon cultural practices and climatic conditions, and can vary with location and season. Quantified measurements are expressed as an average of measurements taken from a number of individual plants of the new variety. The measurements of any individual plant, or any group of plants, of the new variety may vary from the stated average.

20 Tree

Size	Large, width 2.2 m wide, height 3.4 m
Vigor	Strong

	Habit	Upright
	Trunk	Diameter 31 cm at soil level; very rough; overcolor grey 201D; undercolor grey 175A; lenticels prominent, 0.3 to 0.5 cm, yellow 159A
5	Branches	Smooth, greyed red 181A, internode length 3.1 to 3.8 cm, lateral branch diameter 1.8 cm, length 46.2 cm (previous season growth)

Leaves

	Young shoot - length of stipule	Medium
10	Size	Length 10.5 cm; 4.0 cm
	Ratio length to width	Medium
	Shape	Lanceolate, base rounded, apex acuminate, recurved, cross section concave
15	Color	Upper surface green 146A, lower surface green N144A, upper venation color green 154D
	Texture	Smooth
	Margin	Serrate to serrulate

Petiole

	Size	Length 1.5 cm, diameter 0.2 cm
20	Color	Green 154D
	Glands	Present, usually 2, reniform

Flowers

	Bud	Length 0.9 to 1.1 cm, round, smooth, hardy, red-purple 59A, tip pink 62A
	Bud burst	March 18 at Parker, Washington
	Bloom period	March 18 to April 7 at Parker, Washington
5	Flower type	Showy, fragrant, 1 to 4 per cluster
	Petals	Quantity 5; length 1.8 to 2.1 cm, width 1.3 to 1.5 cm; margins ruffled, overlapping; shape obovate to rotund; color pink 69A
10	Sepals	Length 0.5 to 0.6 cm; width 0.4 to 0.5 cm; color red-purple 59A
	Flower size	Diameter 3.5 to 3.7 cm
	Reproductive organs	Stamen white 155D, quantity 39, length 1.0 to 1.3 cm; anther length 0.5 cm, brown 199A; filament 0.9 to 1.2 cm; pistil 0.9 to 1.0 cm, smooth, yellow 3A
15	Pollen	Scarce, yellow 1A
	Fruit	
	Size	Small, diameter 70 mm, height 4.0 cm
	Shape (ventral view)	Broad oblate
	Shape of pistil end	Weakly depressed
20	Symmetry	Symmetric
	Prominence of suture	Weak
	Depth of stalk cavity	Shallow, 0.5 cm

	Width of stalk cavity	Broad, 2.8 cm
	Skin	Color: ground color orange-red 34C, over color red-purple 59A; thin, smooth, tenacious
	Pubescence	Absent
5	Firmness of flesh	Soft
	Ground color of flesh	Yellow-orange 17C
	Anthocyanin coloration directly under skin	Absent or very weakly expressed
	Anthocyanin coloration of flesh	Absent or very weakly expressed
	Anthocyanin coloration around stone	Present, red-purple 59C
10	Pit cavity	Diameter 3.0 cm, color red-purple 59C
	Texture of flesh	Not fibrous
	Sweetness	Very sweet, 12° Brix
	Acidity	Low
	Stone	
15	Size	Small, diameter 3.0 cm
	Shape in lateral view	Oblate
	Color	Red-purple 59C
	Relief of surface	Small pits, ridges
	Tendency of splitting at peak harvest	Absent or very low
20	Adherence to flesh	Absent (freestone)
	Time of maturity for consumption	Early, late July in Parker, Washington
	Tendency to preharvest drop	Absent or very weak

Resistance to diseases and pests None observed

Heat and cold tolerance Tolerant in area tested (USDA Zone 6)